

ABSTRACT

ELECTRICAL MACHINE WITH STATOR COOLING

A fixed stator is arranged around a rotatably mounted rotor in an electric motor that includes at least one cooling unit to which parts of the stator which are to be cooled are thermally coupled by a line system in which a cooling agent circulates according to a thermosyphon effect. The stator parts to be cooled can be arranged in the inner region of a stator housing which is integrated into the line system. The electric motor can be provided with a heating device to maintain the pressure in the inner region when the motor is stopped.